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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

ANTONIENKO, DEBRA L

ART UNIT

PAPER NUMBER

3689

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/518,089

Applicant(s)

TANIGAWA, HIDEKAZU

Examiner

DEBRA ANTONIENKO

Art Unit

3689

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2009 and 02 July 2009.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-5 and 8-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-5 and 8-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submissions filed on 1 May 2009 and 2 July 2009 have been entered.

2. This is a Non-Final Office Action in response to communications received 1 May 2009 and 2 July 2009, wherein:

Claims 1, 2, 6, and 7 have been cancelled previously;
Claims 3-5 and 8-13 have been amended previously;
Claims 14-16 have been added previously; as of 1 May 2009.

Claims 5, 10, and 13 have been amended;
Claims 14-16 have been cancelled; therefore,
Claims 3-5 and 8-13 are pending; currently.

Response to Amendment

3. Regarding the terms *reader* or *reading in*: Applicant's amendments to claims 3-5 and 8-13 are sufficient to overcome the 112, second paragraph, rejections set forth previously in Office Action of 4 March 2009.

4. Regarding the 35 USC § 101 rejections of claims 8-13: Amendments to claims 8, 9, 11, and 12 are sufficient to overcome the rejection. However, claim 10 has not been

amended with a microprocessor unit as other device claims. Furthermore, amendment to claim 13 has taken out the computer tie. Therefore, the rejections remain on claims 10 and 13. See below.

Response to Arguments

5. As to Claims 3, 8, and 11, Applicant argues the obviousness assertion is based on hindsight or is not supported by any basis. Examiner maintains obviousness rejection.

Barney does not disclose a patent value calculation step of calculating a patent value using the following formula: {the number of words for preferred embodiment/the number of words for claims}. However, Barney teaches *a statistical patent rating method and system for rating or ranking patents based on certain selected patent characteristics or "patent metrics."* Such patent metrics may include any number of quantifiable parameters that directly or indirectly measure or report a quality or characteristic of a patent.... Specific patent metrics may include, for example, without limitation, the number of claims, number of words per claim, number of different words per claim, word density (e.g., different-words/total words), length of patent specification... claim type (i.e., method, apparatus, system), etc. (column 11, lines 37-59). Examiner notes that *it must be remembered that the "obviousness" test of § 103 is not one which turns on whether an invention is equivalent to some element in the prior art but rather whether the difference between the prior art and the subject matter in question "is a difference sufficient to render the claimed subject matter unobvious to one*

*skilled in the applicable art * * *." Dann v. Johnston*, 425 U.S. 219, 189 USPQ 257 (1976). Examiner further notes that *the mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness. The gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art.* Ibid. Barney uses word count, number of words per claim, length of patent specification, and word density along with ratios. Therefore, that Barney's example does not state the exact same ratio does not effectively serve to patentably distinguish the claimed invention over the prior art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use different ratios in order to be able to provide a comprehensive quantifiable analysis.

6. As to Claims 4, 9, and 12, Applicant argues that *in Barney, the elements are merely words, and elements are not identified based on a specific letter string.* Barney discloses analysis performed on words and/or word phrases (column 11, line 38 – column 12, line 22). That Barney uses different words to describe the same concept, i.e., "word phrases" rather than "specific letter strings," does not effectively serve to patentably distinguish the claimed invention over the prior art.

7. As to Claims 5, 10, and 13, Applicant argues most recent amendments dated 2 July 2009, therefore, see rejection below.

Claim Objections

8. Claims 5, 10, and 15 are objected to because of the following informalities: At the end of the first clause, "number of each of claims" is improper grammar. At the end of the second clause, there should be a semi-colon. Appropriate correction is required.
9. Claims 8 and 9 are objected to because of the following informalities: Abbreviations or acronyms, i.e., MPU, should be written out in the claims. Appropriate correction is required.

Claim Rejections - 35 USC § 112

10. The following is a quotation of the **first** paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

11. Claims 3, 8, 11 and 5, 10, 13 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.
12. Claims 3, 8, and 11 recite the limitation {the number of words for preferred embodiment/ the number of words for claims} for a specification analysis step. It is unclear how the words for a preferred embodiment are delineated. For example, the instant specification is labeled Embodiment 1... Embodiment 2..., however, not all

specifications are so neatly categorized. Furthermore, paragraph [0084] of the instant specification discloses that *[t]he specification analysis part 1301 analyzes a specification stored in the specification storage part 102. The analysis in this context includes parsing, lexical analysis, and the like, and would usually mean a process of counting the number of words, for example, for predetermined items of a specification....* It is unclear what the predetermined items are and how these predetermined items are determined in the first place to aid in the counting. Examiner asserts that the instant specification does not provide sufficient guidance and direction to enable one skilled in the art to make or use the invention without undue experimentation. It is unclear how the words for a preferred embodiment are delineated even before the counting begins and how the claims are counted as related to the preferred embodiment.

13. Furthermore, the instant specification discloses that the overall patent value is obtained by *weighing the invention development level ($f=5.6$), the inventive feature extraction level ($g=1.14$), and the specification disclosure level ($h=7.48$) to calculate a value of 70 points ([0113]; Figure 18).* It is unclear what the weighing factors are and what determines a weight in the first place. Moreover, in the example given, it is unclear how 70 points are arrived at or what this score means. Paragraph [0114] discloses that *a reference score may appear simultaneously, so as to provide acceptance/rejection criteria.* However, the instant specification does not provide how or where reference scores are determined. Furthermore, paragraph [0122] states

several times that a particular concept is "based on the view...." However, the instant specification does not substantiate these different views.

Specifically, in regard to claims 5, 10, and 13, and the nesting level, the instant specification states that *a specification having the deepest hierarchy is assigned the maximum value on the scale. This is based on the view that the deeper a claim hierarchy is, the more deeply speculated the inventive idea is (i.e., the inventive idea is fully devised from multiple aspects), and hence the higher its patent value ([0122]).* The instant specification does not offer substantiation for this view. Examiner asserts that the instant specification does not provide sufficient guidance and direction to enable one skilled in the art to make or use the invention without undue experimentation. Therefore, it is unclear how the nesting level is used as a parameter to indicate the value of a patent. In other words, how is it that a patent is more valuable if it has a higher nesting value?

14. The following is a quotation of the **second** paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

15. Claims 3, 8, and 11 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is vague and indefinite how the words for the preferred embodiment are determined. In other words, it is unclear what a preferred embodiment encompasses. For example, Applicant uses the language preferred

embodiment in the instant specification. Applicant then lists several embodiments. Are all of the embodiments preferred embodiments or is only one embodiment preferred?

16. Also, the phrase "permits a computer to implement" is vague and indefinite. Permitting something is not the same as actually doing it. Examiner suggests replacing with "when executed in a computer, implements."

Claim Rejections - 35 USC § 101

17. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

18. Claim 10 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 10 recites a device, however, the obtainment unit and the calculator appear to be software per se and not a structural part of the device.

19. Claim 13 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In order for a method to be considered a "process" under §101, a claimed process must either: (1) be tied to another statutory class such as a particular machine that imposes meaningful limits on the method claim's scope or (2) transform underlying subject matter (such as an article or materials). See *Diamond v. Diehr*, 450 U.S. 175, 184 (1981); *Parker v. Flook*, 437 U.S. 584, 588 n.9 (1978); *Gottschalk v. Benson*, 409 U.S. 63, 70 (1972); *In re Bilski*, 545 F.3d 943, 88 USPQ2d 1385 (Fed. Cir. 2008). If neither of these requirements is met by the claim, the

method is not a patent eligible process under §101 and is non-statutory subject matter. With respect to independent claim 13, the computer is merely mentioned in the preamble. It must be positively recited in the body of the claim showing its significant function in the invention. The output step from the computer is considered insignificant extra-solution activity. Therefore, the claim language does not include the required tie or transformation and thus is directed to nonstatutory subject matter.

Claim Rejections - 35 USC § 103

20. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

21. **Claims 3-5 and 8-13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barney et al., U.S. Patent Number 6,556,992 B1 (hereinafter Barney).

Regarding **Claims 3, 8, and 11**, Barney teaches, respectively, a program product stored in a computer readable medium, a data processing device, and a method comprising the following steps of: a specification analysis step of analyzing a specification, so as to obtain a number of words for preferred embodiment and a number of words of claims (column 11, lines 38-59; column 12, lines 7-23; *length of patent specification*); and a patent value output step of outputting said patent value (Figure 11).

Barney does not disclose a patent value calculation step of calculating a patent value using the following formula: {the number of words for preferred embodiment/the number of words for claims}. However, Barney teaches a *statistical patent rating method and system for rating or ranking patents based on certain selected patent characteristics or "patent metrics."* Such patent metrics may include any number of quantifiable parameters that directly or indirectly measure or report a quality or characteristic of a patent.... Specific patent metrics may include, for example, without limitation, the number of claims, number of words per claim, number of different words per claim, word density (e.g., different-words/total words), length of patent specification... claim type (i.e., method, apparatus, system), etc. (column 11, lines 37-59). Examiner notes that *it must be remembered that the "obviousness" test of § 103 is not one which turns on whether an invention is equivalent to some element in the prior art but rather whether the difference between the prior art and the subject matter in question "is a difference sufficient to render the claimed subject matter unobvious to one skilled in the applicable art * * *."* *Dann v. Johnston*, 425 U.S. 219, 189 USPQ 257 (1976). Examiner further notes that *the mere existence of differences between the prior art and an invention does not establish the invention's nonobviousness. The gap between the prior art and respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art.* Ibid. Barney uses word count, number of words per claim, length of patent specification, and word density along with ratios. Therefore, that Barney's example does not state the exact same ratio does not

effectively serve to patentably distinguish the claimed invention over the prior art. Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to use different ratios in order to be able to provide a comprehensive quantifiable analysis.

Regarding **Claims 4, 9, and 12**, Barney teaches, respectively, a program product stored in a computer readable medium, a data processing device, and a method comprising the following steps of: an element obtaining step of obtaining elements based on a specific letter string in a specification; a specification analysis step of analyzing said specification so as to obtain the smallest number of elements composing one claim; a patent value calculation step of calculating a patent value using the smallest number of the elements composing one claim obtained by the specification analysis step, as a parameter; and a patent value output step of outputting said patent value.

Barney discloses counting the number of elements in claims such that elements are words or word phrases. Barney discloses generally using the "word count" of claims, smallest to largest, to illustrate statistical relationships (column 20, lines 18-28; Figure 4). Barney also discloses specific element counts used as quantifiable parameters such as the *frequency or infrequency of certain word usage relative to the general patent population or relative to a defined sub-population of patents in the same general field. For example, each word and/or word phrase in a patent claim (and/or patent*

specification) could be assigned a point value according to its frequency of use...
(column 11, line 38 – column 12, line 22).

22. **Claims 5, 10, and 13** are rejected under 35 U.S.C. 103(a) as being unpatentable over Barney et al., U.S. Patent Number 6,556,992 B1 (hereinafter Barney) in view of Newman, U.S. Patent Number 5,774,833 (hereinafter Newman).

Regarding **Claims 5, 10, and 13**, Barney does not teach, respectively, a program product stored in a computer readable medium, a data processing device, and a method comprising the following steps of: a parent claim number obtainment step of obtaining a parent claim number of each of claims; a parent-dependent relationship information obtainment step of obtaining information of parent-dependent relationships between the claims; a claim hierarchy obtainment step of obtaining a claim hierarchy that relates the claim number and the parent claim number; a nesting level obtainment step of obtaining a nesting level that is the deepest level of the claim hierarchy; a patent value calculation step of calculating a patent value using the claim nesting level as a parameter so that the deeper the nesting level the higher the patent value; and a patent value output step of outputting said patent value.

However, Newman discloses *construction of a claim dependency “tree” which identifies each independent claim and each claim dependency, and verification of correct independent and dependent claim ordering (as prescribed by the Manual for Patent*

Examining Procedure (MPEP) published by the U.S. Patent and Trademark Office)

(column 9, line 63 – column 10, line 49; Figures 4 and 5). Newman further discloses the nesting levels by use of a table with columns (Figure 5). Barney discloses claims and whether or not they are independent or dependent (Figure 11). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Barney with that of Newman to include claim trees in order to further disclose claim relationships.

Regarding using the nesting level as a parameter, it is unclear how the nesting level is used as a parameter to indicate the value of a patent as noted above under 35 USC 112, first paragraph.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DEBRA ANTONIENKO whose telephone number is (571)270-3601. The examiner can normally be reached on Monday through Thursday, 7:00 AM to 5:30 PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Janice Mooneyham can be reached on 571-272-6805. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

DA

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